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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/536,679	05/27/2005	Jurgen Schmiedl	4-22804/A/PCT	4701	
324	7590 08/03/2006		EXAM	EXAMINER	
	CIALTY CHEMICALS	POWERS, FIONA			
	EPARTMENT PLAINS RD		ART UNIT	PAPER NUMBER	
P O BOX 20			1626		
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Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		10/536,679	SCHMIEDL ET AL.			
Office Action Sur	nmary	Examiner	Art Unit			
		Fiona T. Powers	1626			
The MAILING DATE of the Period for Reply	is communication app	ears on the cover sheet with the	correspondence ad	dress		
A SHORTENED STATUTORY WHICHEVER IS LONGER, FR - Extensions of time may be available unde after SIX (6) MONTHS from the mailing d - If NO period for reply is specified above, t - Failure to reply within the set or extended	OM THE MAILING DA or the provisions of 37 CFR 1.13 ate of this communication. the maximum statutory period w period for reply will, by statute, on three months after the mailing	'IS SET TO EXPIRE 3 MONTH ATE OF THIS COMMUNICATIO 66(a). In no event, however, may a reply be ti vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDON date of this communication, even if timely file	N. mely filed n the mailing date of this ∝ ED (35 U.S.C. § 133).			
Status						
	2b)⊠ This n condition for allowar	 action is non-final. ace except for formal matters, pr ix parte Quayle, 1935 C.D. 11, 4		merits is		
Disposition of Claims						
	is/are withdray owed.  to 13 is/are rejected.  It to.  It to restriction and/or  It to by the Examiner  is/are: a) accepted and one of the correction and the correct	vn from consideration.  relection requirement.  r.  epted or b) □ objected to by the drawing(s) be held in abeyance. Secon is required if the drawing(s) is objected to by the drawing(s).	ee 37 CFR 1.85(a). Djected to. See 37 CF			
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)  1) Notice of References Cited (PTO-892  2) Notice of Draftsperson's Patent Draw  3) Information Disclosure Statement(s) ( Paper No(s)/Mail Date 8/29/05.	ing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:	ate	-152)		

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Receipt is acknowledged of the preliminary amendment filed May 27, 2005 and the information disclosure statement filed August 29, 2005, which have been entered in the file.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 4, 5 and 11 to 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boedeker et al. (US 3223470) or Japanese Patent 57-42985 or Japanese Patent 56-118975 or Japanese Patent 50-157422, cited by applicants.

## <u>Determination of the scope and content of the prior art (MPEP §2141.01)</u>

The references disclose structurally similar anthraquinone reactive dyes that are structurally similar to the claimed reactive dyes of the formula (1) where Z<sub>1</sub> is of the formula (2a) where Y is -CH<sub>2</sub>CH<sub>2</sub>U or is of the formula (2d) where Hal is Br. Note Example 9 of Boedeker et al.; Dyes 1 to 4 on page 4 and Dyes 20 to 23 on pages 5 to 6 of JP 57-42985; the dyes in the left-hand column on page 3 of JP 56-118975; and Dye 16 on page 4 of JP 50-157422. The references also disclose a process of dyeing and process for preparing the dyes which is similar to

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the claimed process. Note the examples mentioned above and the corresponding abstracts of the Japanese patents.

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Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

The dyes of the references differ from those claimed only in that hydrogen replaces the  $C_1\text{-}C_4alkyl$  group that corresponds to  $R_1$  of the claimed dyes.

Finding of prima facie obviousness---rational and motivation (MPEP §2142-2413)

However, it is obvious to replace hydrogen with a lower alkyl group on a nitrogen atom. Note Ex parte Tweit, 167 USPQ 688. One of ordinary skill in the art would have been motivated to make the claimed dyes with the expectation that additional dyes useful for the dyeing of polyamide fibers would be obtained. The claimed dyes would have been rendered obvious by the structurally similar dyes of the reference in the absence of any unobvious property. The claimed process for preparing the dyes and process of dyeing would also have been rendered obvious in the absence of any unobvious result.

Claims 1, 2, 4, 5 and 8 to 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehmann et al. (US 5779740), cited by applicants.

## Determination of the scope and content of the prior art (MPEP §2141.01)

The reference discloses structurally similar anthraquinone reactive dyes that are structurally similar to the claimed reactive dyes of the formula (1) where  $Z_1$  is of the formula (2b),

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(2c) or (2d). Note Example 6 in particular Dye 108, and Preparation Examples 3, 4, 11 and 12. Example 6 discloses a process similar to that of claims 8 to 10 where a dye similar to instant formula (1) is used to dye polyamide together with dyes that correspond to formula (4) and (6) of instant claim 8. The Preparation Examples mentioned above prepare dyes similar to the claimed dye of the formula (1) by a similar process.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

The dyes of the references differ from those claimed only in that hydrogen replaces the  $C_1$ - $C_4$ alkyl group that corresponds to  $R_1$  of the claimed dyes.

Finding of prima facie obviousness---rational and motivation (MPEP §2142-2413)

However, it is obvious to replace hydrogen with a lower

alkyl group on a nitrogen atom. Note Ex parte Tweit, 167 USPQ

688. One of ordinary skill in the art would have been motivated to make the claimed dyes with the expectation that additional dyes useful for the dyeing of polyamide fibers would be obtained. The claimed dyes would have been rendered obvious by the structurally similar dyes of the reference in the absence of any unobvious property. The claimed process for preparing the dyes and process of dyeing would also have been rendered obvious in the absence of any unobvious result.

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The references made of record and not relied upon show the state of the art.

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Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fiona T. Powers whose telephone number is 571-272-0702. The examiner can normally be reached on Monday - Friday 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane can be reached on 571-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Fiona T. Powers
Primary Examiner
Art Unit 1626

ftp August 1, 2006